

IN THE CLAIMS

1. – 11. (canceled)

12. (new) A method for controlling switching in a bidirectional line-switched ring network configured with a plurality of optical fibers and a plurality of nodes where a switch request is transferred by using only K bytes,

wherein

(a) under a first state where a first node receives as input an LP-S (lockout of protection (span)) command and a second node adjacent to the first node receives the switch request from the first node via the optical fibers, said method comprises the steps of:

i) when the second node detects a failure on a line over which the second node receives a signal from the first node, and receives the switch request but cannot differentiate—by the K bytes therein—whether the switch request contains the LP-S command or an SF-P (signal fail (protection)) command, the second node transmitting a ring switch request to one or more other of the plurality of nodes; and

ii) each of the one or more other nodes that receives the ring switch request placing a protection channel of itself in a K byte pass-through state allowing only the K bytes to pass therethrough, and

wherein

(b) under a second state where the first node detects a failure in a receiving protection channel from the adjacent second node and the second node receives the switch request from the

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first node via the optical fibers, said method comprises steps i) and ii) and further comprises the steps of:

iii) the first node transmitting the ring switch request to the one or more other nodes after receiving the ring switch request from the second node;

iv) each of the one or more other nodes that receives the ring switch request placing the protection channel of itself in a full pass-through state to connect one span on one side and another span on another side thereof;

v) the second node, after receiving the ring switch request from the first node, executing a ring switch and transmitting the ring switch request; and

vi) the first node executing the ring switch after receiving the ring switch request from the second node.

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